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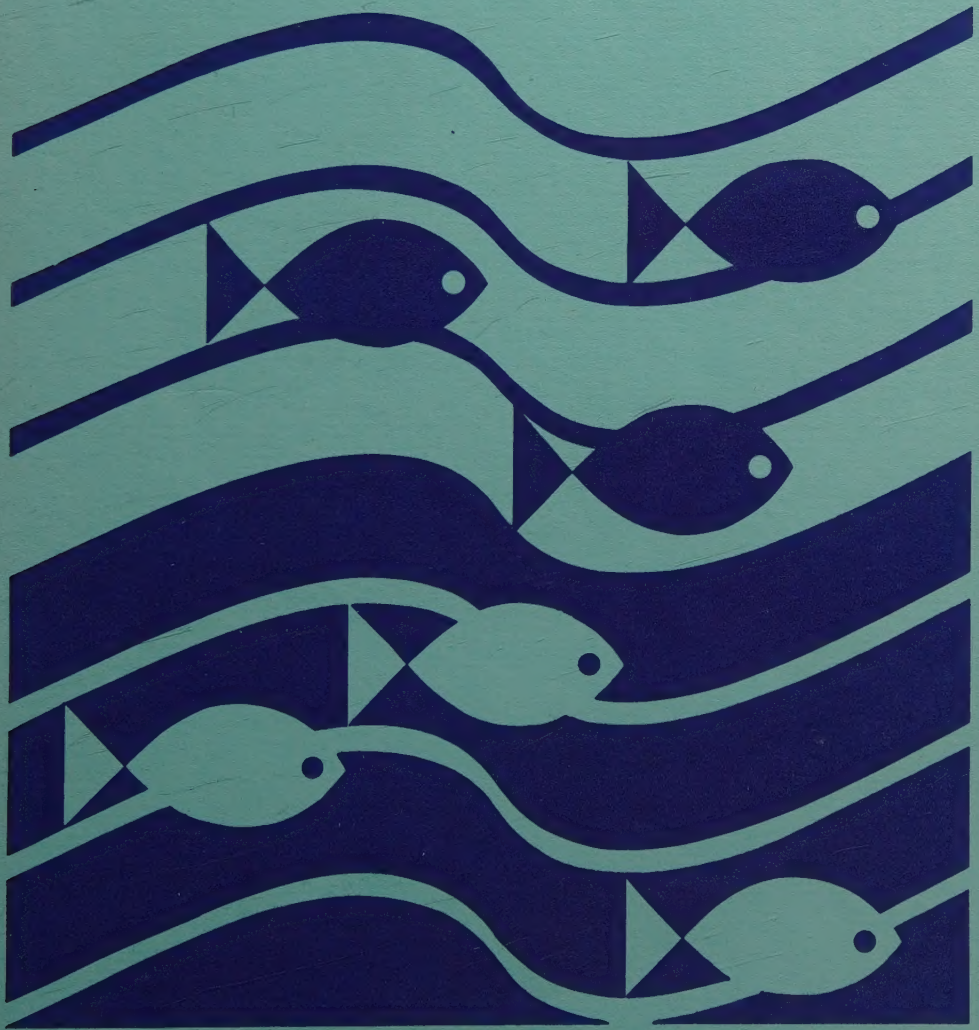

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AQUATIC PLANTS AND THEIR CONTROL

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[Dep. Fish. & Oceans, Pac. Biol. Stn., Nanaimo, BC, Canada V9R 5K6] *Oncorhynchus tshawytscha*.

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[Dep. Fish. & Allied Aquacult., Auburn Univ., AL 36849] *Ictalurus punctatus* and *I. furcatus*.

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90-003812 Gilbert, Carter R. SPECIES PROFILES: LIFE HISTORIES AND ENVIRONMENTAL REQUIREMENTS OF COASTAL FISHES AND INVERTEBRATES (MID-ATLANTIC BIGHT). ATLANTIC AND SHORTNOSED STURGEONS. *U.S. Fish Wildl. Serv. Biol. Rep.* 82(11.122):29p. 1989. Available from U.S. Fish & Wildl. Serv., Publ. Unit, 18th & C St., N.W., Arlington Square Bldg., Washington, DC 20240. FR 35(3)
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[Dep. Mar. Biol., Natl. Fish. Univ. Pusan, Pusan 608-737, Korea] *P. echinogaster* and *P. argenteus*.

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[Hampshire Coll., Amherst, MA 01002] *Cyprinodon variegatus* and *Fundulus heteroclitus* in Massachusetts.

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[Burghardt: Dep. Psychol. & Zool., Univ. Tenn., Knoxville 37996] *Gambusia affinis, Pimephales promelas, Carassius auratus,* and *Notemigonus crysoleucas.*

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[Rosch: Inst. Lake Res. & Fish., Untere Seestr. 81, D-7994 Langenargen, West Germany] *Perca fluviatilis, Leuciscus leuciscus, Rutilus rutilus, Abramis brama,* and *Alburnus alburnus*.

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[All-Union Res. Inst. Mar. Fish. & Oceanogr.-VNIRO, Moscow, USSR] *Channichthyus rhinoceratus, C. velifer, Chionobathyscus dewitti, Dacodraco hunteri,* and *Neopagetopsis ionah.*

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90-004099 Uno, Masayoshi. [EFFECTS OF SEAWATER ACCLIMATION ON JUVENILE SALMONIDS INFECTED WITH *TETRAONCHUS* (MONOGENEA) AND *ICHTHYOPHONUS* (PHYCOMYCETES).] *Fish Pathol.* 25(1):15-19. 1990. In Japanese with English summ. FR 35(3)
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[Tierarztliche Fac., Ludwig-Maximilians-Univ., Munich, West Germany] *Oncorhynchus mykiss* in West Germany.

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[Hetrick: Dep. Microbiol., Univ. Md., College Park 20742] *Pomatomus saltatrix, Morone saxatilis,* and *Cynoscion regalis* in the United States.

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[Natl. Inst. Coastal Aquacult., Kaoseng, Amphur Muang, Songkhla 90000, Thailand] Data for 16 species.

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[Dep. Pharmacol. & Toxicol., Norwegian Coll. Vet. Med., Natl. Vet. Inst., Box 8146 Dep., N-0033 Oslo 1, Norway] *Oncorhynchus mykiss* and *Salmo salar*.

90-004112 Heo, Gang-Joon; Hisatsugu Wakabayashi and Shugo Watabe. PURIFICATION AND CHARACTERIZATION OF PILI FROM *FLAVOBACTERIUM BRANCHIOPHILA*. *Fish Pathol.* 25(1):21-27. 1990. FR 35(3)
[Dep. Fish., Fac. Agric., Univ. Tokyo, Yayoi 1-1-1, Bunkyo-ku, Tokyo 113, Japan]

90-004113 Huntly, P. J.; G. Coleman and A. L. S. Munro. A COMPARATIVE STUDY OF THE SERA OF BROWN TROUT (*SALMO TRUTTA*) AND ATLANTIC SALMON (*SALMO SALAR* L.) BY WESTERN BLOTTING AGAINST *AEROMONAS SALMONICIDA* EXOPROTEINS. *Biochem. Soc. Trans.* 16(6):999. 1988. From Vet. Bull. 60(4):2329. 1990. FR 35(3)
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[Natl. Res. Inst. Fish. Sci., Kachidoki, Chuo, Tokyo 104, Japan] *Tilapia mossambica, Oncorhynchus mykiss, Seriola quinqueradiata, Paralichthys olivaceus, Pagrus major,* and *Trachurus japonicus*.

90-004115 Ishida, Noriko. [COMPARISON OF BILIARY METABOLITES OF OXOLINIC ACID IN SEVEN SPECIES OF TELEOSTS.] *Nippon Suisan Gakkaishi* 56(1):55-59. 1990. In Japanese with English summ. FR 35(3)
[Natl. Res. Inst. Fish. Sci., Kachidoki, Chuo, Tokyo 104, Japan] *Tilapia mossambica, Anguilla japonica, Pagrus major, Trachurus japonicus, Seriola quinqueradiata, Paralichthys olivaceus,* and *Oncorhynchus mykiss*.

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[Fish. Res. Cent., M.A.F., P.O. Box 297, Wellington, New Zealand] *Thunnus alalunga, T. albacares, T. maccoyii, Gasterochisma melampus, Allothunnus fallai, Scomber australasicus,* and *Euthynnus pelamis*.

90-004117 Kawahara, Eijiro; Hiroshi Sako; Setsuzo Nomura and Riichi Kusuda. HEMOLYSIN PRODUCTION BY BETA-HEMOLYTIC *STREPTOCOCCUS* SP. ISOLATED FROM YELLOWTAIL, *SERIOLA QUINQUERADIATA*. *Fish Pathol.* 24(4):219-223. 1989. FR 35(3)
[Lab. Aquat. Microbiol., School Fish. Sci., Kitasato Univ., Sanriku, Iwata 022-01, Japan]

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90-004120 Kusuda, Riichi; Hiroyoshi Sugiura and Kenji Kawai. [DRUG SENSITIVITY OF *PASTEURELLA PISCICIDA* ISOLATED FROM CULTURED YELLOWTAIL FROM 1986 TO 1988.] *Nippon Suisan Gakkaishi* 56(2):239-242. 1990. In Japanese with English summ. FR 35(3)
[Fish Dis. Lab., Fac. Agric., Kochi Univ., Nankoku, Kochi 783, Japan] *Seriola quinqueradiata*.

90-004121 McIntosh, D. and B. Austin. RECOVERY OF AN EXTREMELY PROTEOLYTIC FORM OF *SERRATIA LIQUEFACIENS* AS A PATHOGEN OF ATLANTIC SALMON, *SALMO SALAR*, IN SCOTLAND. *J. Fish Biol.* 36(5):765-772. 1990. FR 35(3)
[Dep. Biol. Sci., Heriot-Watt Univ., Riccarton, Edinburgh EH14 4AS, Scotland] *Oncorhynchus mykiss*.

90-004122 Miyazaki, Teruo; Naoto Kajihara; Kazue Fujiwara and Syuzo Egusa. [A HISTOPATHOLOGICAL STUDY ON INTESTINAL NECROSIS OF LARVAL JAPANESE FLOUNDER.] *Fish Pathol.* 25(1):7-13. 1990. In Japanese with English summ. FR 35(3)
[Fac. Bioresour., Mie Univ., 2-80 Edobashi, Tsu, Mie 514, Japan] *Paralichthys olivaceus*.

90-004123 Naumann, W. [PATHOGENICITY OF *MYCOPLASMA MOBILE* 163 K FOR CARP.] *Inaugural Diss. Tierarztl. Hochschule (Hannover)* 80p. 1988. In German with English summ. From Vet. Bull. 60(4):2442. 1990. FR 35(3)
[Untersuchungen Pathogenet. Mycoplasma Mobile, 163 Karpfen, West Germany] *Cyprinus carpio*.

90-004124 Noga, E. J.; J. F. Wright and L. Pasarell. SOME UNUSUAL FEATURES OF MYCOBACTERIOSIS IN THE CICHLID FISH *OREOCHROMIS MOSSAMBICUS*. *J. Comp. Pathol.* 102(3):335-344. 1990. FR 35(3)
[Dep. Companion Anim. & Special Species Med., Coll. Vet. Med., N.C. State Univ., 4700 Hillsborough St., Raleigh 27606]

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90-004127 Park, Sung-Woo and Hisatsugu Wakabayashi. [KINETICS OF NEUTROPHILS IN THE KIDNEY OF EEL, *ANGUILLA JAPONICA*, INTRAPERITONEALLY INJECTED WITH FORMALIN-KILLED *ESCHERICHIA COLI* AS AN IRRITANT.] *Fish Pathol.* 24(4):233-239. 1989. In Japanese with English summ. FR 35(3)
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90-004128 Rockey, D. D.; L. A. Shook; J. L. Fryer and J. S. Rohovec. SALMONID SERUM INHIBITS HEMOLYTIC ACTIVITY OF THE SECRETED HEMOLYSIN OF *AEROMONAS SALMONICIDA*. *J. Aquat. Anim. Health* 1(4):263-268. 1989.

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[Dep. Microbiol., Oreg. State Univ., Corvalis 97331] *Scorpaenichthys marmoratus, Oncorhynchus kisutch, O. mykiss, Ictalurus punctatus,* and *Micropterus salmoides.*

90-004129 Rose, A. S.; A. E. Ellis and A. L. S. Munro. THE SURVIVAL OF *AEROMONAS SALMONICIDA* SUBSP. *SALMONICIDA* IN SEA WATER. *J. Fish Dis.* 13(3):205-214. 1990. FR 35(3)
[Ellis: DAFS Mar. Lab., P.O. Box 101, Victoria Rd., Aberdeen AB9 8D8, Scotland]

90-004130 Shamsudin, M. N.; K. Tajima; T. Kimura; M. Shariff and I. G. Anderson. CHARACTERIZATION OF THE CAUSATIVE ORGANISM OF ORNAMENTAL FISH MYCOBACTRIOSIS IN MALAYSIA. *Fish Pathol.* 25(1):1-6. 1990. FR 35(3)
[Fac. Fish. & Mar. Sci., Univ. Pertanian Malaysia, 43400 Serdang, Selangor, Malaysia] *Moenkhausia sanctaefilomenae.*

90-004131 Subasinghe, R. P. and C. Sommerville. NO ANTIBACTERIAL PROPERTIES FOUND IN BUCCAL AND SKIN MUCUS OF THE MOUTH-BROODING CICHLID *OREOCHROMIS MOSSAMBICUS. Asian Fish. Sci.* 2(1):109-113. 1988. From Brackishwater Aquacult. Abstr. 4(5/6):555. 1988. FR 35(3)
[Dep. Zool., Univ. Colombo, P.O. Box 1490, Colombo 3, Sri Lanka]

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[Dep. Environ. Conserv., Rome, NY 13440] *Salvelinus namaycush.*

90-004133 Takahashi, Yukinori; Toshiaki Itami; Atushi Nakagawa; Toshio Abe and Yoshito Suga. THERAPEUTIC EFFECT OF FLUMEQUINE AGAINST PSEUDOTUBERCULOSIS IN CULTURED YELLOWTAIL. *Nippon Suisan Gakkaishi* 56(2):223-227. 1990. In English. FR 35(3)
[Dep. Aquacult. & Biol., Shimonoseki Univ. Fish., Shimonoseki 759-65, Japan] *Seriola quinqueradiata.*

90-004134 Tatner, M. F. ANTIGEN-INDUCED BLASTOGENESIS OF SALMON, *SALMO SALAR* L., HEAD KIDNEY LEUCOCYTES TO MODIFIED *AEROMONAS SALMONICIDA* ANTIGENS: A PRELIMINARY EVALUATION METHOD FOR POTENTIAL VACCINE ANTIGENS. *J. Fish Biol.* 36(5):731-739. 1990. FR 35(3)
[Aquat. Vaccine Unit, Inst. Aquacult., Univ. Stirling, Stirling FK9 4LA, Scotland]

90-004135 Ueki, N.; Y. Kayano and K. Muroga. [*PASTEURELLA PISCICIDA* INFECTION IN JUVENILE RED GROUPER (*EPINEPHELUS AKARA*).] *Fish Pathol.* 25(1):43-44. 1990. In Japanese. FR 35(3)

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[Tierhygienische Inst., Postfach 5140, D-7800 Freiburg, West Germany]

90-004137 Weis, J. [A NEW DISEASE OF RAINBOW TROUT FRY (*SALMO GAIRDNERI*) DUE TO *CYTOPHAGA* SP. IN SOUTH BADEN.] *Tieraerztl. Umsch.* 44(1):33-36. 1989. In German with English summ. From Vet. Bull. 59(9):5366.

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[Tierhygienische Inst., Postfach 5140, 7800 Frieburg, West Germany]

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[U.S. Fish & Wildl. Serv., Natl. Fish. Res. Cent.-La Crosse, P.O. Box 818, LaCrosse, WI 54602] *Ictalurus punctatus* and *Oncorhynchus mykiss*.

90-004139 Elshabiny, Laila M.; M. M. Ibrahim and N. Am. Mahmoud. MYCOPLASMA AS FISH PATHOGEN IN EGYPT. *Vet. Med. J. Giza* 37(3):335-343. 1989. FR 35(3)
[Anim. Health Res. Inst., Dokki, Egypt] *Tilapia nilotica, Solea solea, Bagrus bayad*, and *Synodontis schall*.

90-004140 Levine, Jay F.; Jess H. Hawkins; Michael J. Dykstra; Edward J. Noga; David W. Moye and R. Scott Cone. SPECIES DISTRIBUTION OF ULCERATIVE LESIONS ON FINFISH IN THE TAR-PAMLICO RIVER ESTUARY, NORTH CAROLINA. *Dis. Aquat. Org.* 8(1):1-5. 1990. FR 35(3)
[Dep. Microbiol. Pathol. & Parasitol., Coll. Vet. Med., 4700 Hillsborough St., N.C. State Univ., Raleigh 27606] *Brevoortia tyrannus, Leiostomus xanthurus, Micropogonias undulatus*, and data for 41 other species.

90-004141 Marchenko, A. M. [FUNGI INDUCING MYCOSES OF FISH ON FISH BREEDING FARMS IN SAKHALIN.] *Mikol. Fitopatol.* 22(3):212-216. In Russian. From Vet. Bull. 60(2):905. 1990. FR 35(3)
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[Fac. Fish. & Mar. Sci., Univ. Pertanian Malaysia, 43400 Serdang, Selangor, Malaysia] *Ctenopharyngodon idella, Leptobarbus hoeveni, Aristichthys nobilis,* and *Puntius gonionotus.*

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[Inst. Acuic. Torre la Sal (C.S.I.C.), Ribera Cabanes, 12595 Castellon, Spain]

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[Stevenson: Dep. Microbiol., Coll. Biol. Sci., Univ. Guelph, Guelph, ON, Canada N1G 2W1]

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[Dep. Hygiene & Microbiol., Royal Vet. & Agric. Univ., 13 Bulowsvej, DK-1870 Frederiksberg C, Denmark] *Anguilla anguilla*.

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UTILIZATION OF FISHERY PRODUCTS

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Rivers Studies in the Science,
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Aims & Scope

Rivers, a quarterly journal, offers a multidisciplinary forum for research and professional literature addressing the issues of instream flow. A focus on the science, environmental policy, and law of instream flow is useful because of the many and growing controversies in water management that relate to streamflow. Professionals in field biology, law, environmental policy, hydrology and civil engineering have expressed a strong interest in a journal which integrates a wide range of information for the instream flow specialist.

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Africa, Southern
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Africa, Western
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Africa: Lake Malawi
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Africa: Lake Tanganyika
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Africa: Lake Victoria
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Africa: Niger River and Basin
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Alabama
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Alaska
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Alaska, Southeastern
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Alaska: Bering River
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Alaska: Bristol Bay
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Alaska: Cook Inlet
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Alaska: Copper River
90-004411
Alaska: Fish Creek
90-004540
Alaska: Gulf of Alaska
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Alaska: Kenai River
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Alaska: Prince William Sound
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Alaska: Shelikof Strait
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90-003799

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Argentina
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Arizona: Lake Mohave
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Asia, Southeastern
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Asia: Mekong River and Basin
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Atlantic Ocean, North: Browns Bank
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Atlantic Ocean, North: Middle Atlantic Bight
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Atlantic Ocean, North: New York Bight
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Atlantic Ocean, North: Scotian Shelf
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Atlantic Ocean, Northeastern
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Atlantic Ocean, Northwestern
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Atlantic Ocean, South
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Australia: Hervey Bay
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Australia: Murray River and Basin
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Beaufort Sea
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Brazil: Rio Negro
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California: Tuolumne River
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Canada: Lake Opinicon
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Canada: Lake St. Clair
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Canada: Lower Poole Pond
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Canada: Mackenzie River and Basin
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Canada: Manicouagan River
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Canada: Manitoba
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Canada: Muskoka-Haliburton Lakes
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China: Zhujiang River
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Colorado: Green River
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Colorado: Trout Creek
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Cuba: Alacranes Reservoir
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Cuba: Zaza Reservoir
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Czechoslovakia: Klicava Reservoir
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Czechoslovakia: Slapy Reservoir
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Delaware: Delaware Bay
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Denmark
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Egypt: Lake Nasser
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England: Thames River
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England: Tyne River
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England: Wear River
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England: Yealm Estuary
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Finland: Lake Saimaa
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Finland: Lake Yli-Kitka
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Finland: Simojoki River
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Finland: Vantaanjoki River
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Florida: Florida Bay
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Florida: Lake George
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France
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France: Bay of Biscay
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France: Bay of Douarnenez
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France: d'Aydat Lake
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France: Gulf of Lion
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France: Lake Annecy
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France: Mauguio Lagoon
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France: Rhone River
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France: Selune River
90-003729

Georges Bank
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Georgia
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Georgia: Cumberland Island
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Georgia: Powder Springs Creek
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Georgia: South End Ponds
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